

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

What is claimed:

1-34 (Canceled).

35(Currently Amended). A method, according to claim [[34]] 47 wherein the vapor deposition coating is formed by a PVD or CVD process.

36(Currently Amended). A method, according to claim [[34]] 47 wherein the base member in the area of at least one of the side surfaces is supplied with a galvanized layer.

37(Currently Amended). A method, according to claim [[34]] 47 wherein the vapor deposition coating is created based on Cr and N, in a layer thickness between 5 and 70 [[.mu.]]μm.

38(Currently Amended). A method, according to claim [[34]] 47 including forming, under cuts for the creation of a oil-retaining reservoirs.

39(New). A piston ring having an outer annular contact surface extending between opposite side faces of the piston ring, wherein a first portion of said contact surface being made up of a base metal of the piston ring and a remaining second portion of said contact surface being made up of a vapor deposition coating; and further wherein the contact surface merges into each of the side faces at sharp 90° edges that are free of bevels and with the first portion of the contact surface having a machined or ground surface finish and the second vapor deposition coating portion of the contact surface being unmachined or unground and at essentially the same surface level as that of the first portion.

40(New). The piston ring of claim 39, wherein the vapor deposition coating has a thickness of between 5 and 70 μm.

41(New). The piston ring of claim 40 wherein said vapor deposition coating comprises Cr-based or N-based coatings.

42(New). The piston ring of claim 41 wherein said base metal comprises steel or cast iron.

43(New). The piston ring of claim 41 wherein the first portion of the contact surface extends to one of the sharp edges.

44(New). The piston ring of claim 42 wherein the remaining second portion of the contact surface extends to the other of the sharp edges.

45(New). The piston ring of claim 42 wherein the first portion extends to both of said sharp edges with said second portion spaced from said sharp edges.

46(New). The piston ring of claim 42 including an undercut between said first and second portions of said contact surface spaced from said sharp edges.

47(New). A method of forming a coated piston ring, comprising:

forming an annular recess in an outer annular surface of the piston ring extending between opposite side surfaces;

applying a vapor deposition hard coating to the outer surface of the piston ring to build up a depth of coating material in the recess; and

following the coating step, selectively machining or grinding the piston ring in only the regions adjacent the recess to expose in said adjacent regions uncoated base piston ring material that is machined or ground to essentially the same surface level as that of the coating material of the recess, and such that the piston ring has two sharp 90° opposite side edges, and wherein at least one of the sharp side edges is formed by the machined or ground piston ring base material.